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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,852	03/30/2004	Hyun Sook Kim	1594.1363	2332

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EXAMINER	
PERRIN, JOSEPH L	
ART UNIT	PAPER NUMBER
1746	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/811,852	KIM ET AL.	
	Examiner	Art Unit	
	Joseph L. Perrin, Ph.D.	1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 March 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) *13-18 and 22* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12,19-21,23 and 24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *20040419; 20051121; 20061121*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group I, claims 1-12, 19-21 & 23-24, in the reply filed on 13 March 2007 is acknowledged.

The traversal is on the ground(s) that the "wherein" clause is permitted under MPEP §2173.05(g) and that "a functional limitation must be evaluated and considered". This is not found persuasive because while "wherein" clauses are permitted they do not necessarily define apparatus claims. In the instant case, the claimed "wherein" clause is directed to intended use which is not afforded patentable weight in apparatus claims. See MPEP 2114. Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). "[A]pparatus claims cover what a device is, not what a device does." *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). (emphasis in original) The Examiner finds no structural limitations defined by the intended use and therefore such language does not define the structural aspects of the claimed apparatus.

Applicant further argues that the method claims are closely related to the apparatus claims and therefore the claims should be examined together. Essentially, applicant opines that there would be no "serious burden" on the Examiner notwithstanding the fact that, as readily admitted by applicant, the claims have different classification. In accordance with MPEP §803: "For purposes of the initial requirement,

a serious burden on the examiner may be *prima facie* shown by appropriate explanation of separate classification, or separate status in the art, or a different field of search as defined in MPEP § 808.02. That prima facie showing may be rebutted by appropriate showings or evidence by the applicant." In the instant case, the Examiner has provided a *prima facie* showing of separate classification and different field of search as shown in the Restriction Requirement. Applicant's allegations of coextensive search and no "serious burden" include no appropriate showings or evidence and, therefore, are not persuasive. Accordingly, the restriction is considered proper in accordance with MPEP §803.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-12 & 19-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In independent claims 1 & 19, the feeding of the detergent "in response to the detergent being a powdered detergent" renders the claim indefinite because such language suggest some type of sensing/detecting of the type of detergent but no such structure is claimed. That is, is the type of detergent sensed or is this simply a recitation of intended use? Since the original disclosure does not appear to support any sensing or detecting means the claim is construed as the

intended use of powdered detergent, otherwise a possible enablement issue may exist. However, clarification and correction are still required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6, 12, 19, 20, 23 & 24 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,870,906 to PASTRYK et al. ("PASTRYK"). PASTRYK discloses a drum washing machine with water tub (24), rotary tub (25), plural detergent supplies (50/52/54), a detergent feed pipe (74) in fluid communication between the water tub and a spraying unit (41) for spraying into the rotary tub, a detergent feed unit including a detergent dissolution space (70) and pump (28) which dissolves detergent from the water tub to the rotary tub through the feed pipe, and conventional control means for operating the washing machine (including driving the pump and supplying/circulating water and detergent), controllable water feed valves (34/35/37). See Figures 1, 6, and relative associated text. Accordingly, recitation of PASTRYK reads on applicant's claimed apparatus.

5. Claims 1-6, 12, 19, 20, 23 & 24 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,233,718 to HARDAWAY et al. ("HARDAWAY").

HARDAWAY discloses a drum washing machine with water tub (139), rotary tub (35), plural detergent supplies (60/62/64), a detergent feed pipe (with valve "J") in fluid communication between the water tub and a spraying unit (51) for spraying into the rotary tub, a detergent feed unit including a detergent dissolution space (80) and pump (38) which dissolves detergent from the water tub to the rotary tub through the feed pipe, and conventional control means for operating the washing machine (including driving the pump and supplying/circulating water and detergent), controllable water feed valves (44/45). See Figures 1, 6, and relative associated text. Accordingly, recitation of PASTRYK reads on applicant's claimed apparatus.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over PASTRYK or HARDAWAY in view of U.S. Patent Publication No. 2003/0208855 to MCALLISTER et al. ("MCALLISTER"). Recitation of PASTRYK and HARDAWAY are repeated here from above. While both disclose drums rotated by motors, neither appears to specifically disclose rotating the drums in opposite directions (i.e. oscillating). MCALLISTER teaches that it is known in the washing machine art to provide oscillating action for the purpose of enhanced mechanical action in washing clothes, including both horizontal axis and vertical axis rotary drum washing machines (see entire document, for instance, paragraph [0013]. Therefore, the position is taken that it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the washing machines of PASTRYK or HARDAWAY with oscillating washing action for the purpose of enhancing mechanical washing action in a washing machine.

Further regarding claim 8, both circulating the water and reciprocating the water are for the same purpose (i.e. thoroughly dissolving detergent in the washing water prior to spraying into the washing machine) and the position is taken that it would have been obvious to one having ordinary skill in the art at the time the invention was made to either reciprocate the water or circulate the water to achieve said same purpose since both appear to be functional equivalents and achieve the same purpose. The Examiner notes that one-way pumps and reversible pumps are common knowledge in the art and the selection of either type of pump to achieve enhanced detergent dissolving would have been within the level and knowledge of one having ordinary skill in the art absent secondary considerations.

10. Claims 9 & 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over PASTRYK or HARDAWAY. Recitation of PASTRYK and HARDAWAY are repeated here from above. While PASTRYK discloses operating the pump (28) to circulate detergent and water through mixing tank (70) for the purpose of thoroughly dissolving detergent in the washing water, which would necessarily provide a certain degree of reciprocation of the water flow, PASTRYK does not expressly disclose driving the pump to "reciprocate" the detergent for the purpose of thoroughly dissolving detergent in the washing water (note that HARDAWAY provides a similar system with mixing tank (80)). Both circulating the water (in PASTRYK and HARDAWAY) and reciprocating the water (instant invention) are for the same purpose (i.e. thoroughly dissolving detergent in the washing water prior to spraying into the washing machine) and, absent secondary

considerations, the position is taken that it would have been obvious to one having ordinary skill in the art at the time the invention was made to either reciprocate the water or circulate the water to achieve said same purpose since both appear to be functional equivalents and achieve the same purpose.

11. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over PASTRYK or HARDAWAY in view of U.S. Patent No. 5,870,906 to DENISAR. Recitation of PASTRYK and HARDAWAY are repeated here from above. While PASTRYK and HARDAWAY disclose the washing machine operated by the user via a conventional key input controller (18/20/22) neither appears to expressly disclose the key input controller for inputting specified detergents. DENISAR teaches that it is known in the washing machine art to provide key input controls on a detergent dispensing unit for allowing a user to select specific laundry additives (capable of being liquid or solid) (see automatic dispenser 10 in Figure 1 and relative associated text). Therefore, the position is taken that it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the inputting control means of PASTRYK or HARDAWAY with the selective detergent selecting inputting control means of DENISAR to enable a user to selectively dispense one of plural detergents as required to perform the desired washing operation.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent No. 6,591,439 to WHAH et al.; U.S. Patent No. 6,584,811 to WHAH et al.; U.S. Patent No. 6,393872 to WHAH et al.; U.S. Patent No. 6,269,666 to WHAH et al.; U.S. Patent No. 5,507,053 to MUELLER et al.; U.S. Patent No. 5,271,251 to KOVICH et al.; U.S. Patent No. 5,249,441 to PASTRYK et al.; U.S. Patent No. 4,987,627 to CUR et al.; U.S. Patent No. 4,489,574 to SPENDEL; and U.S. Patent No. 4,489,455 to SPENDEL; each being substantially cumulative to recited references and disclosing a washing machine with detergent circulating system from the bottom of the water tub to the opening of the rotary tub via a spraying unit.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Perrin, Ph.D. whose telephone number is (571)272-1305. The examiner can normally be reached on M-F 7:00-4:30, except alternate Fridays.

14. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael E. Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Joseph L. Perrin, Ph.D.
Primary Examiner
Art Unit 1746

JLP